

## Forbidden Foods

By Libby Wiersema
For some people, counting fat grams and calories is the least of worries when choosing from nature's bounty. They have food allergies, and one dietary slip could cause a serious, potentially life-threatening reaction.

Food - you can't live without it. And, even if you could, who would want to give up the joys of eating wonderful things like fresh-baked bread, vine-ripened fruits, lobster or even a simple peanut butter sandwich? For the 5.2 million Americans suffering from food allergies, eating is serious business, because one wrong food choice could trigger a host of reactions ranging from abdominal cramps to hives and swelling and, in extreme cases, even death.

## Food Allergy or Intolerance?

According to the Food and Drug Administration (FDA), a mere 2 percent of adults and 2 to 8 percent of children are truly allergic to certain foods. People often use the term "food allergy" incorrectly, to describe any discomfort they endure after eating. Usually they are experiencing a food intolerance, a much more common condition. A visit to a doctor can help clear up any confusion.
Patrick LaPlante, 34 , suspected he might have a food allergy, though many of his symptoms mimicked other gastrointestinal and respiratory ailments. Sharp stomach pain, diarrhea, gas, fatigue, dizziness and sinus drainage were some of the effects he was experiencing when he finally sought advice from a gastroenterologist. Initial tests suggested food allergies, which prompted further testing with more specific results: Patrick tested positive for soy, wheat and tomato allergies.
A true food allergy alerts the body that a "foreign" substance (the allergy-causing food or allergen) has been introduced, which in turn causes an all-out attack on the "invader." As the body wages war, the person experiences symptoms throughout: the lips may swell and, as the food passes to the stomach and intestines, vomiting, abdominal pain and diarrhea may occur. Hives, sneezing, runny nose and difficulty breathing are other symptoms the person may also experience as a result of the body's reaction to the food. In severe reactions, the allergy sufferer may even go into life-threatening shock, also known as anaphylaxis. Swelling of the throat may ensue, causing trouble breathing, hives, a drop in blood pressure or loss of consciousness. Without immediate treatment, the final result could be death. On the other hand, with food intolerances the problem arises from the metabolism rather than the immune system. Because of a chemical deficiency, your body may not be able to adequately digest some foods (or an ingredient/component of the offending foods). For example, persons with lactose intolerance have trouble digesting lactose (the sugar in milk) and, therefore, may have cramping and diarrhea after drinking or eating dairy products. (See article on Lactose Intolerance, November/December issue.) One exception, however, is celiac disease, a type of food intolerance that does involve the immune system. Individuals with celiac disease, also known as gluten intolerance, have an abnormal immune response to gluten, a component of wheat and other grains. Symptoms can sometimes be severe, characterized by diarrhea, weakness, weight loss, bone disease and blistering, burning rashes.
Where people with food allergies must totally avoid certain foods, those with intolerances can sometimes eat small quantities of offending foods without any side effects. And, unlike allergies, intolerances gradually worsen with age.

## Diagnosing Food Allergies

To make a diagnosis, the doctor first takes a thorough health history to determine if the patient's complaints are consistent with food allergies. The most vital clue will be the symptoms experienced just after ingesting certain foods. "The most common symptoms of food allergies are itching and tingling in the back of the throat with hives and swelling," says gastroenterologist Robert Russell, MD, professor of medicine and nutrition and associate director, USDA Human Nutrition Research Center on Aging at Tufts University.
Sometimes a doctor can't reach a diagnosis through health history alone, so she or he may request a dietary record from the patient. This documentation details the types of foods eaten at each meal and any adverse effects. This may help the doctor and patient to identify patterns in reactions.
When a pattern seems to exist between certain foods and symptoms, the next step is a diet that eliminates suspected allergens. "During an elimination diet, suspect foods are eliminated and then added back, one by one, to pin down exactly which food is causing the problem," says Dr. Russell. If a specific food is identified through the diet, the doctor may order tests for verification. Dr. Russell further explains, "Testing for food allergens is done with a skin prick test using extracts of particular foods. If the individual is allergic, a hive will develop at the site of the skin prick."
According to the FDA, a test administered in "blind fashion" to reduce any psychological factors is the most accurate of all the food allergy tests. "Blind fashion" means the patient is given either a sample of the suspected food (in capsule form, so it cannot be identified) or a placebo (a capsule filled with a harmless substance such as sugar). Only the doctor knows the difference. Any side effects are recorded and the doctor determines if a true food allergy exists for a specific food.
These tests are quick, easy and relatively safe; however, in patients at risk for severe anaphylactic reactions, skin prick testing is not recommended because it could provoke a deadly response. Safer alternatives are the RAST and ELISA tests, which measure the presence of food-specific antibodies in the blood. However, the results of these tests are not available as quickly as the skin prick tests, and they tend to be more costly.

## The Most Common Culprits

Surprisingly, of all the items stocked on your grocer's shelves, only a few foods account for most allergic reactions. According to Dr. Russell, soy products, fish, shellfish, nuts (both peanuts and tree nuts like Brazil nuts, walnuts, pecans) and eggs are the main culprits. Children tend to react more to eggs, milk and peanuts. (See "Food Allergies in Children," page 7.)
The foods that cause reactions in adults and children are often the foods they eat most frequently. For instance, rice allergy is common in Japan, while codfish allergies are rampant in Scandinavia. And, with the advent of soy, it is quickly becoming one of the leading allergies in the United States, creating many dilemmas for soy allergy sufferers like Patrick LaPlante. "The biggest problem for me is that, because soy is cheap, products like soybean oil are common in our food supply," he says. "For example, I cannot find a margarine that does not contain some soy."

## Additives and Biotechnology

Food additives have been controversial over the years; aspartame (a sugar substitute), monosodium glutamate (MSG—enhances flavor), sulfites (a preservative found in wine and some foods) and the food color FD\&C yellow No. 5 have all been targeted as possible food allergens. Though the FDA has determined these ingredients to be largely safe for consumption, many people have shown sensitivity to them; hence, the FDA requires manufacturers to list these additives on product labels. Modern technology may pose a few problems of its own-as new varieties of food are developed through genetic engineering, allergy sufferers are concerned that this practice could introduce allergens not nor-mally found in foods before they were altered. For instance, some varieties of tomatoes that have been developed through gene splicing may actually contain fish genes. "There is a fear that new genetically modified foods will be introducing allergy-causing proteins into the food supply, although none has as yet been identified," explains Dr. Russell. "It had been earlier shown that a Brazil nut protein that was put into soybeans was a cause of major allergic reactions; however, this soybean product never made it to the market." Manufacturers are required by the FDA to prove that their food
product does not contain allergenic proteins before it may be made available to the American consumer.

## Becoming a Food Detective

There is no cure for food allergies; therefore allergy sufferers have a critical task to perform in order to remain symptom-free -avoid the offending food or ingredient completely. The Nutrition Labeling and Education Act took a lot of the guesswork out of identifying "forbidden" foods by requiring manufacturers to label every product completely. The new requirements make it easier to readily identify offending ingredients. Before this law was passed, foods such as mayonnaise or chocolate were listed only by name on product labels; now these foods must be broken down into all their components. For example, if a food contains mayonnaise, the label has to specify all the ingredients of mayonnaiseeggs, oil, lemon juice and salt.
You might be thinking, "That sounds easy enough." Still, many allergy-producers like eggs, peanuts and milk are present in foods you might not suspect. For instance, some salad dressings contain eggs, and peanuts are sometimes added to meat or other protein products as a filler. Every label must be read in detail.
There is yet another hurdle that the food-allergy sufferer must overcome, and it is a great deal trickier-eating out. Restaurants, which are regulated by state health departments, traditionally are not required to label food ingredients. A dinner out with the family could quite easily become a nightmare if a "forbidden" food is accidentally eaten. The National Restaurant Association, having recognized the potential problems, now works to equip restaurant employees with the knowledge and skills necessary to not only help customers avoid certain foods, but also to implement emergency action should a food allergy incident occur. Still, eating out is risky. So, if you cannot determine the ingredients of a particular food or what types of substances a food has been cooked in, it is better to play it safe and avoid it.
Patrick LaPlante has learned to implement certain strategies through trial and error. Following are some of the measures he has taken to avoid an allergic reaction:

- Avoids restaurants, except those with chefs who will cook to order.
- Eats few or no processed foods.
- Avoids foods with vague labeling (i.e. "natural flavors," "herbs and spices").
- Prepares food using only pure ingredients.
- Stays at hotels that have kitchen facilities in the room.
- Visits specialty stores for hard-to-find diet-specific foods.


## Cross Reactivity

For persons who experience severe allergic reactions, doctors usually recommend avoiding foods similar to the offender. For instance, if a patient is allergic to shrimp, testing will usually point to allergies for crab, lobster and crayfish, as well. This is known as cross reactivity. Similarly, people with ragweed allergies might find that when they eat certain melons their mouths begin to itch, or people with birch pollen allergies may react when eating apples.

## Allergic to Exercise?

Sometimes it takes more than just eating a forbidden food to provoke an allergic reaction. There are cases where a person will eat a specific food right before exercising, and, as they become more and more active, begin to itch, get dizzy and develop food allergy symptoms. This type of reaction seems to be triggered by the body's sudden rise in temperature. Not eating for at least two hours prior to
exercise is the cure for these exercise-induced food allergies.

## What to do for Food Allergy Reactions

Persons with food allergies, especially if they are severe, must be ready to treat an inadvertent exposure at a moment's notice. Even the most cautious person can occasionally slip up and eat something that causes a reaction. This is why it is imperative that people who have experienced anaphylactic reactions protect themselves with medical alert bracelets or necklaces detailing the specific allergy. Also, these people should always have in their possession a syringe of epinephrine, prescribed by their doctor, and be ready to self-administer this life-saving medication if necessary. These dangerous anaphylactic reactions can lead to death even if they start out with something as mild as a tingling in the throat—be prepared to phone emergency services immediately.
For milder allergic reactions like stomach cramps, hives or sneezing, over-the-counter antihistamines such as Benadryl® may provide some relief. Bronchodilators may also be helpful for alleviating breathing difficulties. It is important to remember that no medication can prevent allergic reactions before the food is eaten. Your doctor can recommend the proper treatment for your allergy symptoms. Dr. Russell adds, "The most effective treatment is avoidance, that is, identify the offending food and avoid it. If symptoms do occur, antihistamines are helpful, but epinephrine may be lifesaving."

## Resource Link:

The Food Allergy Network 1-800-929-4040, www.foodallergy.org
Food and Drug Administration, HFE-88, 5600 Fishers Lane, Rockville, MD 20857
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## Sidebar 1: Strategies for Avoiding Allergic Reaction

The following strategies for avoiding severe allergic reaction are recommended by the Food Allergy Network (FAN), a national nonprofit organization established to increase public awareness about food allergies, conduct research and provide education. These recommendations have been reviewed by the gastroenterologists on Digestive Health \& Nutrition's Editorial Board.

- Avoid eating the foods to which you are allergic. Read ingredient statements for all foods carefully. If the food does not have a label, don't eat that food.
- Pay attention to early warning signs and symptoms. Many food-allergic individuals report tingling in the mouth, swelling of the lips or itchy or scratchy throat as soon as the food enters the mouth.
- If you suspect a reaction is beginning, do not go to the bathroom alone-take a friend with you. Symptoms can quickly become overwhelming. Teach friends and relatives how they can help you.
- Prepare for accidents. Epinephrine is the prescription medication of choice for managing allergic reactions. It is available for personal use in two forms: AnaGuard ${ }^{\circledR}$ and EpiPen ${ }^{\circledR}$. If prescribed, these medications should be carried at all times.
- Wear a medical emergency identification bracelet or necklace.
- Never use an asthma inhaler to treat a severe anaphylactic reaction.
- Seek the advice of an allergist or gastroenterologist if you suspect you have a food allergy, particularly if you have asthma or suspect an allergy to peanuts or tree nuts (walnuts, pecans, pistachios, Brazil nuts), fish or shellfish. These are the foods most often implicated in severe or
life-threatening allergic reactions.
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